

Post-1996 State Implementation Plans for Philadelphia

Phase I Submittal

What's required for post-1996?

- Rate Of Progress (ROP) means three percent per year VOC (or equivalent) reduction for every year until the standard is attained. Milestones at 1999, 2002, 2005.
- Attainment demonstration means photochemical oxidant modeling AND adopted control measures to assure attainment

Timing of post-1996 SIPs

- Due November 15, 1994
- No state submitted approvable plan
- Why not? Transport issues, data collection, complex modeling, controversial regulations

What then?

- EPA developed approach to allow approval in two phases
- Phase I to address mandated requirements and local attainment
- Phase II to address regional transport issues

Post-1996 Phase I Requirements

- Phase I plan due latest during 1996
- Implementation of measures by 1999
- At least 9 percent reduction by 1999
- Schedule to adopt mandated measures with implementation by 1999
- Enforceable commitments for Phase II actions
- Latest modeling results

Enforceable Commitments

- Participate in consultative process to address regional transport
- Adopt additional control measures as necessary for local and regional attainment and meeting Rate of Progress requirements
- Identify upwind reductions necessary
- Schedule for completing adoption of measures

What makes a commitment enforceable?

- Developed through SIP process
- Public comment period
- Submitted to EPA

State Law Regarding "Commitment SIPs"

- 60 day public comment period
- Analysis of alternatives and reasons for final strategy
- Economic impact of alternatives including agency resources
- Submission to Environmental Quality Board

Commonwealth needs to make Phase I submittal

- Redo 15% plan: update inspection/maintenance, stationary source data, contingency measures
- Redo ROP (3%) plan as above and to address milestone years, especially 1999
- Bring "enforceable commitments" to public hearing, including schedule of adoption of unspecified measures

Proposed 15% Plan Schedule

- Public comment period starts June 21
- Public comment period ends July 22
- Public hearing on July 22
- Submit plan by July 29

Proposed 3% /Attainment Plan Schedule

- Public comment starts August 16
- Public comment ends September 18
- Public hearing September 18
- Submit plan by September 23

Phase II

- Assess regional strategies; refine local strategies
- Submit plan by mid-1997
- Final rules submitted no later than 1999

***Southeast
Pennsylvania
Stakeholder Workgroup***

**Clean Air Act Implementation
in New Jersey**

New Jersey Department of Environmental
Protection
May 30, 1996

Overview

- Federal Measures
- Stationary Source Measures
- Mobile Source Measures
- Attainment Planning

Scope of the Ozone Problem in NJ

Volatile Organic Compounds (VOCs) + Nitrogen Oxides (NOx) + Sunlight = Ozone

Immediate Health Effects*

- Coughing
- Painful breathing
- Loss of certain lung functions
- Respiratory tract & eye irritation

Long-Term Health Effects*

- Respiratory illness
- Asthma attacks

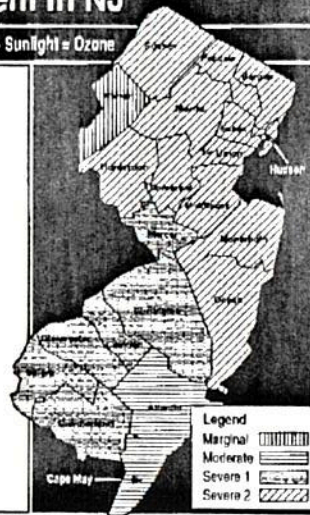
Agricultural Effects

- Decreases crop yields

Other Effects

- Erodes synthetic materials

**These health problems particularly affect
young children, athletes, people who work
outdoors, asthmatics and the elderly.*



Federal Measures

- Tier 1 Motor Vehicle Emission Standards
- Federal Reformulated Gasoline
 - New Jersey has opted entire state into program
- Consumer Products Rule (Proposed)
- AIMS Coatings Rule (Proposed)
- Autobody Refinishing Rule (Proposed)
- Off-Highway Rules (Proposed/Adopted)

Stationary Source Measures

- New Source Review
- VOC RACT
- NOx RACT
- Operating Permits
- OTC NOx MOU
- Open Market Trading Program

New Source Review

- Requires State of the Art for all sources
- Permits small sources
 - Boilers > 1 MMBTU/hr
 - Dry cleaning machines
 - Gas stations
- Requires emission offsets for large sources
 - VOC or NOx > 25 tons/year must offset at 1.3 to 1

VOC RACT

- General
 - All limits apply state-wide
 - Originally effective in 1976, with various updates.
- VOC Storage Tanks > 2,000 Gallons
 - White paint, conservation vent, additional controls on larger tanks
- Gasoline Transfer Operations
 - Stage 1 and Stage 2 state-wide
- Transfer of Other VOCs
 - Transfers into tanks require submerged fill
 - Transfers into delivery vessels at which have potential emissions of 1 ton per year require Stage 1 (Effective May, 1995)
- Marine Vessel Loading
 - Transfer of gasoline into marine vessels must be done through a vapor balance system (Effective February, 1991)
- Open Top Tanks and Surface Cleaners
 - Various operational restrictions

VOC RACT (Cont)

- Surface Coating Operations
 - Applies to all sources > 0.5 gal/hr or 2 gallons per week.
 - Emission limits consistent with the Federal CTGs
- Large Boilers
 - Emission limits on CO as surrogate for VOC (Effective May, 1995)
- Stationary Gas Turbines
 - Emission limits on CO as surrogate for VOC (Effective May, 1995)
- Stationary Internal Combustion Engines
 - Emission limits on CO as surrogate for VOC (Effective May, 1995)
- Asphalt Plants
 - 250 ppmvd VOC emission limit (Effective May, 1995)
- Flares
 - 95% Control Efficiency, various operational requirements (Effective May, 1995)

VOC RACT (Cont)

- Leak Detection and Repair
 - Applies to refineries, natural gas/gasoline processing plants, SOCOMI facilities and chemical plants
 - Various inspection and recordkeeping requirements (Updated May, 1995)
- Cutback and Emulsified Asphalt
 - Prohibits the use of these materials in the summer
- Dry Cleaning Operations
 - Requires the use of "dry-to-dry" machines, or the equivalent
- Natural Gas Pipelines
 - Requires information collection on leaks and ventings (Effective October, 1994)
- Case-by-Case
 - Any remaining source with > 3 lbs/hr emission rate must submit a case-by-case RACT analysis (Effective May, 1995)

NOx RACT

- General
 - All limits effective May, 1995
 - All limits apply state-wide
- Utility and Large Industrial Boilers
 - Limits by fuel type, firing method.
 - Limits generally more stringent than Title IV
- Smaller Industrial/Commercial Boilers
 - Limits consistent with USEPA Guidelines
- Stationary Gas Turbines
 - Emission limits by type/fuel
 - Limits consistent with USEPA guidelines
- Asphalt Plants
 - 200 ppmvd NOx allowable emission rate
 - Requirement to adjust the combustion process annually
- Glass Plants
 - Emission limits consistent with USEPA guidelines
 - Borosilicate Glass plants required to reduce emission by 30%

NOx RACT (Cont)

- Other Major Facilities
 - Case-by-case Determination
- Rule Allows for Averaging
 - Multiple pieces of equipment owned by the same person
 - Sources can be averaged together to demonstrate compliance
- Larger sources (> 250 MMBTU/hr)
required to have CEMS
- All other sources must stack test to demonstrate compliance

Stationary Source Measures

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MARYLAND'S APPROACH TO THE OZONE PROBLEM

May 30, 1996



